Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex parte JEFFREY DAN RUPP and MICHAEL EDWARD BREWER

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Appeal No. 2002-1590
Application No. 09/511,516

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ON BRIEF

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Before Abrams, Frankfort, and Staab, Administrative Patent Judges.

Frankfort, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 20, all of the claims pending in this application.

As noted on page 1 of the specification, appellants' invention relates to vehicle pedal assemblies and, more particularly, to a pedal assembly, such as a brake pedal assembly, that is releasable from a normal operative condition upon imposition of a frontal load to an automotive vehicle such

as would occur in a frontal collision. Independent claims 1, 9 and 17 are representative of the subject matter on appeal and a copy of those claims can be found in the Appendix to appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Cannon	3,011,655	Dec. 5, 1961
Laue	4,901,426	Feb. 20, 1990
Okuhara et al. (Okuhara)	6,109,164	Aug. 29, 2000 (filed May 1, 1998)
Hjerpe	WO99/60457	Nov. 25, 1999

Claims 1 through 8 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which appellants regard as their invention. According to the examiner,

> Claim 1 was amended to recite that the control mechanism is released "independently of a force applied" to the push rod; however, this is inaccurate since the control mechanism is released upon deceleration which itself causes a force to be applied to the push rod. (answer, page 3).

Claims 1, 2, 9 through 12 and 17 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Hjerpe (Figure 1).

Claims 1, 2, 6, 7, 9 through 11, 14, 15, 17 and 19 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Okuhara (Figures 4A, 4B).

Claims 13 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hjerpe in view of Cannon.

Claims 8, 16 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hjerpe in view of Laue.

Claims 8, 16 and 20 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Okuhara in view of Laue.

Rather than reiterate the examiner's full commentary concerning each of the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellants regarding those rejections, we make reference to the examiner's answer (Paper No. 11, mailed October 30, 2001) for the examiner's reasoning in support of the rejections, and to appellants' brief (Paper No. 10, filed October 1, 2001) and reply brief (Paper No. 12, filed January 25, 2002) for the arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by appellants and the examiner. As a consequence of our review, we have made the determinations which follow.

Looking first to the examiner's rejection of claims 1 through 8 under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which appellants regard as their invention, we must agree with the examiner that the recitation in independent claim 1 of the control mechanism being released "independently of a force applied to said collapsible rod..." (emphasis added) is inaccurate, and also vague and indefinite. In any predetermined vehicle deceleration, the push rod (22) of appellants' invention will experience forces acting on the push rod due to deceleration of the vehicle and, in the circumstance of a frontal collision, there exists the possibility of axial compression forces acting on the push rod which would tend to move the push rod and pedal towards the driver's compartment prior to release of the ball bearings (58). It is also likely that in any deceleration situation the push rod (22) would be subjected to an axial force

applied by the vehicle operator through the pedal (14). Appellants' assertion in the brief (page 11) that one skilled in the art, in context, would readily understand that "a force applied to said collapsible push rod" does not refer to reactive force acting on the push rod due to deceleration of the vehicle, is unpersuasive and would appear to have us read limitations from the specification into the claim, which we will not do.

For the above reasons, we will sustain the examiner's rejection of independent claim 1 under 35 U.S.C. § 112, second paragraph. It follows that claims 2 through 8 which depend from claim 1 also suffer from the same indefiniteness and that the examiner's rejection of those claims on the same basis will likewise be sustained.

Turning to the examiner's rejection of claims 1 and 2 under 35 U.S.C. § 102(a) based on Hjerpe, the examiner's rejection of claims 1, 2, 6 and 7 under 35 U.S.C. § 102(e) based on Okuhara, and the rejections of claim 8 under 35 U.S.C. § 103(a) based on Hjerpe and Laue or Okuhara and Laue, we emphasis again that these claims contain language which renders the subject matter thereof indefinite. Accordingly, we find that it is not reasonably possible to apply the prior art relied upon by the examiner to these claims in deciding the questions of anticipation under 35

U.S.C. § 102 or obviousness under 35 U.S.C. § 103(a) without resorting to considerable speculation and conjecture as to exactly what the structure of the claimed pedal assembly is and as to what the exact meaning of the above questioned limitation in independent claim 1 may be. This being the case, we are constrained to reverse the examiner's above-noted rejections of appealed claims 1, 2 and 6 through 8 based on the applied prior art in light of the holding in In re Steele,305 F.2d 859 134 USPQ 292 (CCPA 1962). We hasten to add that this reversal of the examiner's rejections is not based on the merits of the rejections, but only on technical grounds relating to the indefiniteness of the appealed claims.[1]

We turn now to the examiner's rejection of claims 9 through 12 and 17 under 35 U.S.C. § 102(a) as being anticipated by Hjerpe (Figure 1). As noted on pages 13 and 14 of the brief, independent claim 9 sets forth a releasable pedal system for an automotive vehicle, wherein the system includes a control mechanism "for preventing relative movement between said first and second rod members during normal vehicle operation" (emphasis added) and which is "operable to allow for relative movement

[1] As mere guidance to the examiner and appellants, we note that it would appear that the amendments proposed for claim 1 in Paper No. 7, filed July 30, 2001, and refused entry by the examiner, would overcome the rejection of claim 1 under 35 U.S.C. § 112, second paragraph, and also define over the two prior art references to Hjerpe and Okuhara applied by the examiner.

between said first and second rod members upon experiencing a predetermined deceleration."

On page 6 of the brief, appellants provide a fair explanation of the structure and operation of the brake pedal assembly seen in Figure 1 of Hjerpe. Of significance is the fact that the control mechanism (7) of Hjerpe is responsive to the application of a force in excess of a predetermined force on the plate (4) of pedal (1) to permit the rod members (6) and (10) therein to move relative to one another and permit the pedal (1) to move forwardly in the vehicle, thus minimizing the risk of injury to the driver of the vehicle in the event of a frontal collision or merely in the event of excess force above the predetermined level of force being applied to pedal (1) or plate (4) by the operator. Thus, it is clear that unlike appellants' claimed releasable brake pedal system, the pedal system and control mechanism of Hjerpe does not prevent relative movement between the first and second rod members during normal vehicle operation. Moreover, given the unknown variables involved in the pedal system of Hjerpe, e.g., the mass of the piston (11), the strength of the "very strong compression spring 12" (page 6, line 7), the viscosity of the hydraulic fluid in housing (10) and the nature of the constriction (18), it is totally speculative on the examiner's part to conclude that the pedal system and control

mechanism of Hjerpe is "operable to allow for relative movement between said first and second rod members upon experiencing a predetermined deceleration," as required in appellants' claim 9.

On the basis of the foregoing, we will not sustain the examiner's rejection of independent claim 9 under 35 U.S.C. § 102(a) based on Hjerpe, or the like rejection of claims 10 through 12 which depend from claim 9.

Independent claim 17 defines a brake pedal assembly for an automotive vehicle, wherein the assembly includes

> a control mechanism including an inertial mass responsive to deceleration for maintaining said push rod in a non-collapsed state during normal vehicle operation, said control mechanism being deployed upon experiencing a predetermined vehicle deceleration to allow the first rod member to move relative to the second rod member to a collapsed state to reduce force transferred to the pedal during a vehicle collision.

As explained in our treatment of claim 9 above, given the unknown variables involved in the pedal system of Hjerpe, it is totally speculative on the examiner's part to assert (answer, page 8) that the control mechanism of Hjerpe is deployed or actuated upon experiencing a predetermined vehicle deceleration to allow the first and second rod members to move relative to one another to a collapsed state. Given the lack of any such disclosure in Hjerpe, we note that this must of necessity be

based on inherency, however, inherency may not be established by probabilities or possibilities, but must instead be "the natural result flowing from the operation as taught." See In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981). In the present case, the disclosure of Hjerpe does not provide an adequate factual basis to establish that the natural result flowing from following the teachings of that reference would be a brake pedal assembly like that claimed by appellants. Accordingly, we will not sustain the examiner's rejection of claim 17 under 35 U.S.C. § 102(a) based on Hjerpe.

We turn next to the examiner's rejection of claims 9 through 11, 14, 15, 17 and 19 under 35 U.S.C. § 102(e) as being anticipated by Okuhara (Figures 4A, 4B). A fair explanation of the structure and operation of the brake pedal assembly seen in Figures 1-4 of Okuhara can be found on page 7 of appellants' brief. Similar to the pedal system in Hjerpe, the pedal system of Okuhara includes a control mechanism which permits collapse of the push rod upon application of an external force to the push rod, regardless of whether or not any given level of vehicle deceleration is present. Thus, with particular regard to claim 9 on appeal, the releasable pedal system of Okuhara has no control mechanism for "preventing" relative movement between the first and second rod members during normal vehicle operation, as set

forth in claim 9, since a force above a predetermined level applied by the vehicle operator to the brake pedal (12) would be sufficient to cause movement of outer rod section (6) over the projection (25c) and thereby allow collapse of the push rod during normal driving operations.

Moreover, with regard to both independent claims 9 and 17, we are of the opinion that the examiner's conclusion that the control mechanism of Okuhara is operable or deployed upon experiencing a predetermined deceleration (answer, page 8), is based entirely on speculation and conjecture. There is no indication in Okuhara of any such operation of the system therein and, in our opinion, no basis to conclude that any such operation would be inherent.[2] Accordingly, the examiner's rejection of claims 9 through 11, 14, 15, 17 and 19 under 35 U.S.C. § 102(e) as being anticipated by Okuhara (Figures 4A, 4B) will not be sustained.

With regard to the examiner's rejection of claims 13 and 18 under 35 U.S.C. § 103(a) based on Hjerpe and Cannon, and the

[2] As is made clear in Okuhara (e.g., col. 1, lines 57-64 and col. 5, lines 47-60), it is the retreating movement of the master cylinder (M) toward the vehicle compartment as a result of a frontal collision of the vehicle that applies an axial compressing force larger than the predetermined force to the push rod (10), if the driver's foot is on the brake pedal (12), and which causes the coupling means seen in Figures 4A and 4B of the patent to be released to permit the rod segments (25) and (26) to slide relative to each other, not vehicle deceleration.

examiner's rejections of claims 16 and 20 based alternatively on Hjerpe and Laue or Okuhara and Laue, we have reviewed the patents to Cannon and Laue, but find nothing therein that provides for that which we have indicated above to be lacking in the examiner's basic references to Hjerpe and Okuhara. Accordingly, the examiner's rejections of dependent claims 13, 16, 18 and 20 under 35 U.S.C. § 103(a) will also not be sustained.

To summarize, the examiner's rejection of claims 1, 2, 9 through 12 and 17 under 35 U.S.C. § 102(a) as being anticipated by Hjerpe has not been sustained; nor has the examiner's rejection of claims 1, 2, 6, 7, 9 through 11, 14, 15, 17 and 19 under 35 U.S.C. § 102(e) as being anticipated by Okuhara. In addition, each of the examiner's rejections under 35 U.S.C. § 103(a) has not been sustained. However, the rejection of claims 1 through 8 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which appellants regard as their invention, has been sustained.

The decision of the examiner is accordingly affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

Neal E. Abrams Administrative Patent Judge	)
Charles E. Frankfort Administrative Patent Judge	) BOARD OF PATENT) APPEALS AND) INTERFERENCES
Lawrence J. Staab Administrative Patent Judge	)

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